

TESTING THE SCIENTIFICITY OF PROGRESSIVE LEGAL THEORY THROUGH KARL POPPER'S FALSIFICATION: A STUDY OF THE PHILOSOPHY OF SCIENCE

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Abstract

The development of scientific knowledge starting from a problem that often arises because the existing theory is seen as unable to solve or is no longer adequate to overcome the problem. The progressive legal theory initiated by Satjipto Rahardjo was born when the existing legal theory was seen as no longer adequate to overcome legal problems in Indonesian society. However, the problem with the progressive legal theory that has not been seriously touched on so far is the scientific nature of the progressive legal theory as a theory from the perspective of the philosophy of science. According to Popper, a theory is scientific if and only if it can be refuted by an event that can be imagined. Falsification for Popper is a demarcation criterion that provides a distinction between scientific and non-scientific theories or pseudoscience. Therefore, it is important to conduct research on whether the progressive legal theory is a scientific, non-scientific, or pseudoscience theory? so that the progressive legal theory undergoes corroboration (confirmation). This study uses a library research method with a qualitative approach, using a descriptive method (descriptive-analytical). The results of this study are based on the application of falsification to the progressive legal theory, which has a theoretical core in the form of a hypothesis "law is not just a matter of rule, but also of behavior", is non-falsifiable, thus non-scientific. However, this does not mean that progressive legal theory is not enlightening or meaningless.

Keywords: Falsification, Demarcation, Scientific Theory, Progressive Law.

Abstrak

Perkembangan ilmu pengetahuan ilmiah bertitik tolak dari sebuah permasalahan yang sering timbul lantaran teori yang ada dipandang tidak mampu memecahkan atau sudah tidak memadai untuk mengatasi permasalahan. Teori hukum progresif yang digagas oleh Satjipto Rahardjo lahir ketika teori hukum yang ada dipandang tidak lagi memadai untuk mengatasi permasalahan hukum dimasyarakat Indonesia. Namun yang menjadi permasalahan dari teori hukum progresif yang selama ini belum disentuh secara serius ialah mengenai keilmiahan teori hukum progresif sebagai sebuah teori dari perspektif filsafat ilmu. Menurut Popper sebuah teori adalah ilmiah jika dan hanya jika dapat disangkal oleh peristiwa yang dapat dibayangkan. Falsifikasi bagi Popper merupakan kriteria demarkasi yang memberikan distingsi antara teori ilmiah dan non-ilmiah atau pseudoscience. Oleh karena itu penting untuk dilakukan penelitian mengenai apakah teori hukum progresif merupakan teori ilmiah, non-ilmiah, atau ilmu semu (pseudoscience)? agar teori hukum progresif mengalami corroboration (pengukuhan). Penelitian ini menggunakan metode penelitian kepustakaan (library research) dengan pendekatan kualitatif, menggunakan metode deskriptif (deskriptif-analitis). Hasil penelitian ini adalah berdasarkan penerapan falsifikasi terhadap teori hukum progresif, yang memiliki inti teori berupa hipotesa "hukum bukan hanya urusan (a business of rule), tetapi juga perilaku (matter of behavior)", ialah tidak falsifiable, sehingga non-ilmiah. Namun bukan berarti teori hukum progresif tidak mencerahkan atau tidak bermakna.

Kata kunci: Falsifikasi, Demarkasi, Teori Ilmiah, Hukum Progresif.



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INTRODUCTION

In general, thinking is a daily human activity. Ideas are the result of thinking activities in an effort to find knowledge. Ideas can be called scientific knowledge if they have a strong foundation and are not easily refuted or broken so that they can become a guiding instrument in living life. Scientific knowledge has a big impact on us in living life and responding to the world. Every aspect of our lives today uses many products resulting from scientific knowledge activities, even used as authentic evidence, because the investigation is rational and the highest objective, so it is often used as a basis for making decisions in various aspects of life, especially in the field of law (justice).

Scientific knowledge is essentially a system of description and explanation, which aims to produce typologies, explanations, predictions, understanding and control over an event.¹ The development of science is inseparable from the influence of the philosophy of science, which plays a descriptive role to understand how science works, understand the development of individual science and evaluative. In addition, the philosophy of science has a normative role that provides benchmarks, demarcation criteria, the nature of science, critical, which questions the discovery and justification of science.² Science can be defined as a systematic effort to organize knowledge as a set of testable explanations and predictions about the universe.³

In the development of the philosophy of science, a philosopher named Karl Popper conducted a search for demarcation criteria between science and non-science and pseudoscience. Popper tried to find out what the differences were between physics theories, and theories that he thought were unscientific in psychology and sociology.⁴ According to Popper, a theory is only scientific if it has positive results from predictions that are truly at risk of being wrong. A theory is scientific only if it can be refuted by conceivable events. Therefore, a true scientific theory is open to criticism and has the risk of being wrong. For Popper, every true test of a scientific theory is logically an attempt to falsify it.⁵

The development of scientific knowledge starts from a problem,⁶ which is interesting to be solved by a researcher or scientist. Problems often arise because existing scientific theories or knowledge are seen as unable to solve, at least not satisfying, concrete problems in society. Progressive legal theory was born when existing legal theories were seen as no longer adequate to

¹ Herdito Sandi Pratama, *Apa Itu Ilmu Pengetahuan: Konsep, Pernyataan, dan Pengetahuan Ilmiah*, Ppt Paparan Perkuliahan Magister Filsafat FIB-UI (Depok: FIB-UI, 2023).

² Pratama.

³ Suddhachit Mitra, "An Analysis of the Falsification Criterion of Karl Popper: A Critical Review," *Tattva-Journal of Philosophy* 12, no. 1 (2020): 1.

⁴ James Ladyman, *Understanding Philosophy of Science*, (New York: Routledge, 2002). h. 64-65.

⁵ Karl Popper Stanford, *Encyclopedia of Philosophy*, (Stanford University, 1997), h. 5.

⁶ Rizal Muntasyir, "Landasan Filosofis Mazhab Hukum Progresif: Tinjauan Filsafat Ilmu," *Jurnal Filsafat* 18, no. 1 (2008): 16.

overcome problems in Indonesian society. Progressive law was initiated by Satjipto Rahardjo, which first appeared in his various writings such as in the Kompas Newspaper since July 15, 2002. Satjipto's original legal ideas continue to roll in discourse, writings in the mass media, seminars in forums and learning in postgraduate law.⁷

The theory of progressive law was born from Satjipto's anxiety in seeing the reality of law enforcement which is very concerning in Indonesia, where law enforcement is carried out with a positivistic and legal-formalistic approach. The reality that exists so far is that law is understood only as a law and its enforcers (legal apparatus) are only mouthpieces of the law. According to Satjipto, the paradigm of progressive law is that "law is for humans."⁸ Departing from the paradigm of "law is for humans", Satjipto Rahardjo built a hypothesis stating that "Law is not only a matter of rule, but also of behavior."⁹

Since the emergence of the progressive legal theory initiated by Satjipto until now, the progressive legal theory is a very popular theory among legal practitioners, legal experts and legal researchers.¹⁰ However, the problem with Satjipto's progressive legal theory that has not been seriously touched upon by legal experts and legal researchers is the scientific nature of progressive legal theory as a theory. Therefore, this study examines the problem of whether progressive legal theory is a scientific, non-scientific, or pseudoscience theory. This study is important to conduct so that there are demarcation criteria that provide distinctions that can be drawn from progressive legal theory as a scientific, non-scientific, or pseudoscience theory, in order to experience confirmation (corroboration).

Previous research by other researchers that is relevant to this research is from Rizal Mustansyir entitled "Philosophical Basis of Progressive Legal School: Review of Philosophy of Science". The results of the study suggest that progressive law is still too early to be called a theory and progressive law can develop into a legal theory if placed in the framework of a scientific research program by finding the main core of the program (hard core) that is protected from various forms of errors (falsifiable).¹¹ The next research by Hyronomus Rhiti is entitled "Philosophical

⁷ Romli Atmasasmita, *Rekonstruksi terhadap Teori Hukum Pembangunan dan Teori Hukum Progresif* (Yogyakarta: Genta Publishing, 2012), h. 86–87.

⁸ Satjipto Rahardjo, *Penegakan Hukum Progresif*, 1 ed. (Jakarta: Kompas Media Nusantara, 2010), h. 61.

⁹ Mukhidin, "Hukum Progresif Sebagai Solusi Hukum Yang Mensejahterakan Rakyat," *Jurnal Pembaharuan Hukum* 1, no. 3 (2014): 281.

¹⁰ Since the emergence of the progressive legal theory initiated by Satjipto until now there have been many writings and research conducted by legal experts and legal researchers discussing the progressive legal theory and not a few in legal writings and research that develop Satjipto's progressive legal theory, even in some writings and research on legal issues using the progressive legal theory approach. Therefore, the progressive legal theory is a very popular theory among legal practitioners, legal experts and legal researchers until now.

¹¹ Muntasyir, "Landasan Filosofis Mazhab Hukum Progresif: Tinjauan Filsafat Ilmu."

Basis of Progressive Law". The results of the research suggest that based on certain philosophies it can be said that metaphysical anthropology, realism, process philosophy and postmodernism are the philosophical roots of progressive law.¹²

RESEARCH METHODS

This research uses a library research method.¹³ To collect primary and secondary data on Karl Popper's falsification theory and Satjipto Rahardjo's Progressive Law Theory. Then the data is analyzed with a qualitative approach, using a descriptive method to obtain a complete and in-depth picture and understanding philosophically (descriptive-analytical). So this type of research is a philosophical qualitative research.

RESULTS AND DISCUSSION

Karl Popper's Falsification

Karl Popper was born on July 28, 1902 in Vienna. In 1928 Popper took his Ph.D., in philosophy. Popper is a social and political philosopher, a "critical rationalist". Popper is also a committed lawyer and a staunch defender of society and a critic of totalitarianism.¹⁴ Karl Popper was a philosopher who had a significant influence on the philosophy of science during the 20th century and many scientists used his ideas and therefore he was made a member of the Royal Society of London, which is one of the most prestigious scientific associations. Some of his works include "The Poverty of Historicism" (1944) and "The Open Society and Its Enemies" (1945) which are still widely read by political theorists. Popper tried to find the difference between physical theories and theories that he thought were unscientific in psychology and sociology, his findings were then poured into his work entitled *The Logic of Scientific Discoveries* (1959).¹⁵

Popper formed his view of science starting from his concern about Marxist theory about social nature and psychoanalytic theory about human psychology which emerged during the Enlightenment era which its adherents claimed was a fulfillment of the promise of enlightenment regarding the science of society and human behavior.¹⁶ Freud repeatedly stated to his audience that the science of psychoanalysis he discovered was scientific. The results of the research he presented were based on the method of induction, not just empty speculation. Marx also claimed that the

¹² Hyronomus Rhiti, "Landasan Filosofis Hukum Progresif," *Jurnal Ilmu Hukum Justitia Et Pax* 31, no. 1 (2016).

¹³ Akhmad Anton Bakker, *Anton Bakker, Akhmad Charris Zubair, Metodologi Penelitian Filsafat* (Yogyakarta: PT. Kanisius, 1990), h. 109.

¹⁴ Stanford, *Encyclopedia of Philosophy*, h. 1–2..

¹⁵ Ladyman, *Understanding Philosophy of Science*. h. 64-65.

¹⁶ Ladyman.

science he initiated was scientific. Marxism says that the analysis of history is scientific because it is based on observations of real facts.¹⁷

Popper considered Marx's and Freud's theories to be pseudoscience. According to Popper, Marxists and psychoanalysts both have many examples of phenomena that are examples of their general principles. The problem is that it is all too easy to collect positive examples that support some theory, especially when the theory is so general in its claims that it does not seem to rule out anything. Therefore, Popper thought that theories that appear to have great explanatory power are suspect precisely because they explain so much.¹⁸

Popper compared Freud's psychoanalytic theory with Einstein's relativity theory. Popper suspected that the main difference between the two theories lies in the intrinsic "risk". Einstein's theory has the potential to cause falsification, while Freud's psychoanalytic theory is in principle non-falsifiable. The risk component in Einstein's theory comes from the fact that very unlikely consequences, according to the Newtonian paradigm (such as the bending of light towards a large object, a fact confirmed by Eddington in 1919), which if proven wrong, then falsified the theory. In addition, Popper criticized the Marxist theory, when the facts showed that it was inadequate, it was worked on with the support of ad-hoc hypotheses to describe the facts. So according to Popper, Marxism is a dogma, it can even be said to be a pseudo-science, as well as the psychoanalytic theory is a pseudo-science.¹⁹

Although according to logical positivism, Marxism and psychoanalysis are scientific because they are based on the induction method.²⁰ But Popper still refused. According to Popper, inductive logic does not provide a proper distinction of the empirical, non-metaphysical character of a theoretical system, because it does not provide a criterion of demarcation. Therefore, according to Popper, the main problem in the philosophy of science is the problem of demarcation.²¹ Popper stated that all observations cannot be made without a theory that precedes it. Therefore, according to Popper, distinguishing between science and non-science or pseudo-science cannot be done based on the inductive method.²² Moreover, all observations are selective and laden with theory.²³ However, Popper suggested that inductive reasoning is necessary to form theories from observations, while deductive reasoning can be used to derive predictions from theories and to

¹⁷ A. Setyo Wibowo, *Cara Kerja Ilmu Filsafat dan Filsafat Ilmu* (Jakarta: Pepustakaan Populer Gramedia, 2023), h. 182–83.

¹⁸ Ladyman, *Understanding Philosophy of Science*. h. h. 65-67

¹⁹ Mitra, "An Analysis of the Falsification Criterion of Karl Popper: A Critical Review," h. 2.

²⁰ Wibowo, *Cara Kerja Ilmu Filsafat dan Filsafat Ilmu*, h. 184.

²¹ Karl. R. Popper, *The Logic of Scientific Discovery*, (New York: Routledge, 2002). h. 10-11.

²² Stanford, *Understanding Philosophy of Science*. h. 5.

²³ Mitra, "An Analysis of the Falsification Criterion of Karl Popper: A Critical Review," h. 3.

falsify or refute those predictions. Thus, if the predictions of a theory survive falsification, then the theory is falsifiable.²⁴

A frequently used example that simultaneously highlights the problem of inductive and deductive reasoning is about a scientist's hypothesis that states "all swans are white". After careful observation to test this hypothesis and no sightings of non-white swans, the scientist concludes that all swans are indeed white. This is inductive reasoning. In this case, the scientist assumes that all other swans, even though they have not been observed, are considered white. Whereas in deductive reasoning of Popper's falsification theory, the scientist can formulate the hypothesis that all swans are not white. Suppose he then sees a non-white swan at place x and time t, it logically follows from the deduction that all swans are not white and the truth of that conclusion cannot be denied. Therefore, accepted knowledge and facts can be improved by conjecture and experimentation through falsification.²⁵

Popper eventually replaced the induction method with falsification as a valid method for conducting scientific inquiry.²⁶ The method proposed by Popper is an application to science of a more general conception of reason which he calls critical rationality.²⁷ According to Popper a theory is scientific if and only if it has positive predictive results that are completely at risk of being wrong.²⁸ This means that a true scientific theory is open to criticism and has the risk of being wrong, because for Popper, a theory is scientific only if it can be refuted by imaginable events.²⁹ Therefore, every genuine test of a scientific theory is logically an attempt to falsify it. In a critical sense, Popper's demarcation theory is based on his perception of the logical asymmetry that holds between verification and falsification. For Popper, it is impossible to conclusively verify a universal proposition by induction, while a single counterexample proves the universal law to be false.³⁰

Popper emphasized that it should not be concluded from the fact that a theory has withstood the most rigorous tests for a long time that it has been verified; rather, such a theory should be recognized as having received a high level of evidence and can be maintained as the best scientific theory available until it is falsified or replaced by a better theory. The more difficult it is to find errors, the more the hypothesis or theory is confirmed or corroborated.³¹

²⁴ Mick Wilkinson, "Testing the Null Hypothesis: The Forgotten Legacy of Karl Popper?," *Journal of Sports Sciences* 31, no. 9 (2013): 920.

²⁵ Popper dalam Wilkinson.

²⁶ Mitra, "An Analysis of the Falsification Criterion of Karl Popper: A Critical Review," h. 4.

²⁷ Maarten Derksen, "Putting Popper to Work," *Journal Segap Theori & Psychology* 29, no. 4 (2019): 453.

²⁸ Mitra, "An Analysis of the Falsification Criterion of Karl Popper: A Critical Review," h. 4.

²⁹ Popper, *The Logic of Scientific Discovery*, h. 66.

³⁰ Mitra, "An Analysis of the Falsification Criterion of Karl Popper: A Critical Review," h. 4.

³¹ Stanford, *Encyclopedia of Philosophy*, h. 3.

Popper distinguishes between falsifiability and falsification. Falsifiability as a criterion used for the empirical character of a system of statements. While falsification, is used to determine under what conditions a system is considered falsified. A theory is falsified only if it has accepted contradictory basic statements. This condition is necessary, but not sufficient, because single events that cannot be reproduced are not important for science. Thus, some basic statements that deviate and contradict the theory are falsified. Therefore a basic statement is only falsified if reproducible effects are found that refute the theory.³²

A falsifiable hypothesis can have a very low degree of universality, obtained, as it were, by generalizing the individual coordinates of the observed results. Although it must be intersubjectively tested, it need not actually be a strictly universal statement. Thus, for the falsity of a statement such as, "All crows are black," the intersubjectively testable statement that there is a family of white crows in the New York zoo is sufficient to invalidate the statement. All this shows the urgency of replacing falsifiable hypotheses with better ones.³³ Popper claims that the principle of falsification is not a way to determine the comprehensiveness of a scientific theory, but as a method of demarcation between scientific and unscientific or pseudoscience theories.³⁴ If a theory is unscientific, it does not mean that it is not enlightening or meaningless. A theory may be falsifiable at a certain time, but as it develops (science or technology) the theory becomes falsifiable later on.³⁵

Scientific knowledge works and develops historically, in the sense that later theories perfect earlier theories so that they move towards or even approach the truth. If falsification is applied, it has the potential to cause the collapse of a theory that does not yet have the technology to test it, as a result the theory will wither before it develops, because it has been declared unscientific or cannot withstand testing, so it is non-falsifiable. This certainly has an impact on the slow development or growth of scientific knowledge. However, we cannot simply ignore Popper's falsification theory, because the falsification theory aims to enable us not only to know more about knowledge but also to contribute to the advancement of scientific knowledge.³⁶

The significance of the falsification theory is to see all the weaknesses and errors of scientific theory or the discovery of new, deeper and more general problems.³⁷ So that the theory can be immediately corrected for its shortcomings, so that it becomes a strong and solid theory, so

³² Popper, *The Logic of Scientific Discovery*, h. 66-67.

³³ Popper.

³⁴ Popper.

³⁵ Pratama, *Apa Itu Ilmu Pengetahuan: Konsep, Pernyataan, dan Pengetahuan Ilmiah*, Ppt Paparan Perkuliahan Magister Filsafat FIB-UI.

³⁶ Derksen, "Putting Popper to Work," h. 449.

³⁷ D Forcellini, "The Role Of Falsification In The Validation Of Numerical Models," *Journal Civil Engeneering and Enviromental System* 40, no. 1-2 (2023): 51.

that it can withstand all forms of testing, even the harshest ones. According to Popper, science advances thanks to conjecture and falsification, because for Popper there is no final truth in science.³⁸ Flexibility as a demarcation criterion is needed as a distinction between true scientific knowledge and non-scientific or pseudo-science.

Falsification is present as a demarcation criterion that is able to realize the goals of scientific knowledge. Through falsification a theory will be proven scientific and not scientific or pseudoscience. Falsification proves whether a theory is able to survive or not from attempts at denial and error, until it reaches its superiority over previous theories, because science develops and advances through trial and error, and through conjecture and rejection.³⁹ Only theories that have been tested hard are better than previous theories, so that when implemented or used far from errors that may occur or can be predicted to occur. Therefore, the use of Popper's falsification is still very relevant today to separate a scientific theory from non-scientific or pseudoscience and to find errors that may occur or can be predicted to occur in the proposed scientific theory and as an effort to improve previous scientific theories, so that a later theory can go even closer to the truth and superior.

Satjipto Rahardjo's Progressive Legal Theory

Satjipto Rahardjo is a legal sociologist and Professor Emeritus at the Faculty of Law, Diponegoro University, Semarang (UNDIP). Satjipto was born in 1930 in Karanganyar (Banyumas) Central Java. He completed his legal education at the Faculty of Law, University of Indonesia in Jakarta in 1960. In 1972, he participated in Visiting Scholar at California University for 1 year to deepen his study of Law and Society. Then he took a Doctoral Education at the Faculty of Law, UNDIP and completed it in 1979. Satjipto actively teaches at the Faculty of Law, Undip and a number of Postgraduate programs at various other universities.⁴⁰

The idea of Progressive Legal Theory first appeared in Satjipto's various freelance writings in Kompas since 2002.⁴¹ Starting with an article in Kompas on July 15, 2002 entitled "Indonesia Wants Progressive Law Enforcement" which stated that Indonesia could not continue to drag on the way law enforcement, as it has been done so far. Indonesia now needs a type of law enforcement

³⁸ Wibowo, *Cara Kerja Ilmu Filsafat dan Filsafat Ilmu*, h. 186.

³⁹ A. F Chalmers, *Apa itu yang dinamakan Ilmu. Terjemahan dari Redaksi Hasta Mitra*, 1 ed. (Jakarta: Hasta Mitra, 1982), h. 39.

⁴⁰ Rahardjo, *Penegakan Hukum Progresif*, h. 273–275.

⁴¹ Saifullah, *Dinamika Teori Hukum, Sebuah Pembacaan Kritis- Paradigmatik* (Malang: Pustaka Pelajar, 2018), 2. Tulisan-tulisan Satjipto mengenai teori hukum progresif diantaranya ialah Membedah Hukum Progresif, Kompas, Jakarta, 2006. Hukum dalam Jagat Ketertiban, UKI Press, Jakarta, 2006. Biarkan Hukum Mengalir, Kompas, Jakarta, 2007. Hukum dan Perilaku, Kompas, Jakarta, 2009. Hukum Progresif Sebuah Sintesa Hukum Indonesia, Genta Publishing, Yogyakarta, 2009. Penegakan Hukum Progresif, Kompas, Jakarta, 2010.

that it wants to call progressive (PHP). Observations so far have shown that even though this nation loudly shouts the supremacy of law, the results are still disappointing, for example, to handle the problem of corruption, there are almost no results shown. People say that a lot of corruption occurs, but the corruptors and their legal fleet are smarter at breaking the legal moves that want to be imposed on them.⁴²

The progressive legal theory originated from Satjipto's anxiety in seeing the reality of law enforcement which was very concerning in Indonesia, where law enforcement was carried out with a positivistic-formalistic approach. The reality that has existed so far is that law is understood only as a law and its enforcers (legal apparatus) are only mouthpieces of the law without any space and willingness to act progressively.⁴³ This progressive idea in law puts forward the view that studying legal phenomena, whether carried out by academics or practitioners, should be studied from a holistic, integrative and comprehensive perspective. According to Satjipto Rahardjo, progressive law views the world and law with a flowing perspective, like *Panta Rei* (everything flows) from the philosopher Heraklito.⁴⁴

According to Satjipto Rahardjo the current law is the law as in the text or legislation is the law as a scheme formulated deliberately rationally. In the context of such law Satjipto Rahardjo is of the view that the law has experienced a shift in form, from law that appears immediately (interactional law) to law that is made and enacted (legislated law).⁴⁵ According to Satjipto, law is essentially born because of human social interaction so that law is born naturally, not because of social construction that is deliberately formed and formulated through legislation. The shift in the form of law creates a corridor that becomes closed or at least narrows. That corridor is to rule with common sense (fairness, reasonableness, common sense).⁴⁶ Law based on text has a strong tendency to be rigid and regimentative. Such a way of law, especially if it is excessive, raises various major problems, especially in relation to achieving justice.⁴⁷ Progressive law sees the world and law with a flowing view, like *Panta Rei* (everything flows) of the philosopher Heraclitus.⁴⁸

⁴² Saifullah. h. 2.

⁴³ Rahardjo, *Penegakan Hukum Progresif*, h. viii.

⁴⁴ Saifullah, *Dinamika Teori Hukum, Sebuah Pembacaan Kritis- Paradigmatik*, h. 61.

⁴⁵ Rahardjo, *Penegakan Hukum Progresif*, h. 7.

⁴⁶ Rahardjo. h. 10.

⁴⁷ Rahardjo.

⁴⁸ Rahardjo. h. 61.

The characteristics of the progressive legal theory proposed by Satjipto Rahardjo are as follows:⁴⁹

1. The paradigm of progressive law is that "law is for humans". This basic belief, optic or belief does not see law as something central in law, but rather humans are at the center of the rotation of law. Law is for humans, not humans for law.
2. Progressive Law refuses to maintain the status quo in law. That law is the benchmark for all, and man is for the law.
3. Written legal civilization will give rise to both consequences and risks, so our way of enforcing the law should also anticipate how to overcome obstacles in using written law.
4. Progressive law pays great attention to the role of human behavior in law. This is diametrically opposed to the idea that law is only a matter of regulations.

According to Satjipto Rahardjo, progressive law is a way of law that is always restless to build itself, so that it is qualified to serve and bring people to prosperity and happiness. This ideal is carried out with continuous activities between breaking down laws that hinder and hinder development (to arrest development) to build better ones. Progressive law carries out liberation, both in terms of thinking and acting in law, so that it is able to let the law flow to complete its task of serving humans and humanity.⁵⁰ For Satjipto Rahardjo, improving the legal side is not unnecessary, but it is not the only one. With all the busyness of improving the legal side, the legal supremacy movement has turned out to be very fruitless.⁵¹ This means that our focus so far on legal issues has been on the formation of legislation.

Based on Satjipto Rahardjo's observation of legal practices so far, there is a clear "intervention" by behavior towards the normativeness (commands) of the law. People read the rules and think that people should act this way or that. However, what happens is different or not exactly as people understand. This is what is called behavioral intervention. Departing from this phenomenon, Satjipto built a theoretical concept that "law is not only a matter (a business of rule), but also behavior (matter of behavior).⁵² So the progressive legal theory wants to say that our legal problem so far has been about our positivistic-formalistic legal methods, the existence of law is not for humans but humans for the law.

⁴⁹ Rahardjo. h. 61-66.

⁵⁰ Rahardjo. h. 69.

⁵¹ Rahardjo. h. 3.

⁵² Rahardjo. h. 4.

From Satjipto's progressive legal theory, several legal experts have opinions, including Romli Atmasasmita, Shidarta and Sudek are as follows:

1. According to Romli Atmasasmita, the basic assumption of the progressive legal theory initiated by Satjipto Rahardjo is that "law is for humans, not the other way around".⁵³
2. According to Shidarta, the postulate inherent in progressive legal thinking is "Progressive law is for humans, not humans for the law."⁵⁴
3. According to Suteki, the progressive legal movement is based on two basic assumptions, namely; first, "Law is for humans, not the other way around," second, "Law is not an absolute and final institution, because law is always in the process of continuing to become (law as a process, law in the making)."⁵⁵

Suteki further explained that the idea of Satjipto Rahardjo has been proven right in Indonesian legal life. Although there are still many judges who are trapped in the ritual of legal positivism, there are also many who have adopted the legal method following Satjipto's progressive legal ideas. The decisions of judges, both general court judges and constitutional judges, have shown their progressiveness.⁵⁶

Several legal experts as explained above describe and identify and reveal the postulates and basic assumptions underlying the progressive legal theory and some also show that Satjipto's progressive legal theory has been proven correct because it has been and can be applied in legal life in Indonesia by judges through their decisions. This means that the existence of the progressive legal theory initiated by Satjipto Rahardjo is very relevant to legal life in Indonesia, especially as a panacea for legal problems that have so far only relied on positivism law that relies on law enforcement through rigid formal legal procedures, which in legal practice often experience contradictions and deadlocks in achieving truth and justice.

The Application of Falsification to Progressive Legal Theory

Every true test of a scientific theory is logically an attempt to falsify it. Falsification as a demarcation criterion provides a distinction between scientific and non-scientific or pseudo-science theories. Therefore, the application of falsification to progressive legal theory is an attempt to demarcate progressive legal theory in order to provide a distinction that can be drawn from progressive legal theory as a scientific and non-scientific or pseudo-science theory. According to

⁵³ Saifullah, *Dinamika Teori Hukum, Sebuah Pembacaan Kritis- Paradigmatik*. h. 4.

⁵⁴ Safitri dkk ed, *Satjipto Rahardjo dan Hukum Progresif: Urgensi dan Kritik*, (Jakarta: Epistema Institut, 2018). h. 55-58.

⁵⁵ Safitri dkk ed. h. 34.

⁵⁶ Safitri dkk ed. h. 41-44.

Popper, only theories that can be proven by falsification are true scientific theories, the more difficult it is to find errors, the more the proposition of a theory actually experiences confirmation or corroboration, while those that cannot be falsified are non-scientific or pseudo-science theories. However, if a theory is not scientific, it does not mean that the theory is not enlightening or meaningless. It may be that a theory is not falsifiable at a certain time, but along with developments (science or technology) the theory is falsifiable later on, so that it becomes a scientific theory.

In falsifying the progressive legal theory, propositions as basic assumptions and as the core theory of progressive legal theory must first be found and distinguished. In the progressive legal theory initiated by Satjipto, there are propositions as basic assumptions of progressive legal theory.⁵⁷ Progressive legal theory always emphasizes that "law is for humans", this proposition is called by Satjipto as the paradigm of progressive law, which then from the proposition "law is for humans" Satjipto departs to the next propositions. Therefore, the main basic assumption of progressive legal theory can be said to be in the proposition that states that "law is for humans". This is in line with the opinion expressed by Romly Shidarta, Atmasasmita and Suketi who stated that the basic assumption of progressive legal theory is "law is for humans". Then Rizal Mustansyir stated that the first basic assumption of progressive legal theory is "law is for humans".⁵⁸ Furthermore, from the basic assumptions of progressive legal theory, Satjipto then built a hypothesis which stated that "law is not only a matter of rule, but also of behavior."⁵⁹

Based on the statements made by Satjipto Rahardjo in forming the progressive legal theory, it can be classified as follows:

⁵⁷ Safitri dkk ed. h. 61-66.

⁵⁸ Rizal Mustansyir, *"Landasan Filosofis Mazhab Hukum Progresif: Tinjauan Filsafat Ilmu"* h. 17.

⁵⁹ Satjipto Rahardjo, *Membedah Hukum Progresif*, 3 ed. (Jakarta: Kompas Media Nusantara, 2008). h. 4.

Progressive Legal Theory Statement/Proposition Classification Table

No	Statement/Proposition	Type
1	Law is for man, not man for law.	Basic (main) assumptions
2	Progressive Law refuses to maintain the status quo in law, that law is the benchmark for everything, and humans are for the law.	Basic assumptions
3	Written legal civilization will give rise to both consequences and risks, so the way we apply the law should also anticipate how to overcome obstacles in using written law.	Basic assumptions
4	Progressive law pays great attention to the role of human behavior in law. This is diametrically opposed to the idea that law is only a matter of regulations.	Basic assumptions
5	Law is not just a business (a business of rule), but also a matter of behavior (a matter of behavior).	Core theory/Hypothesis

Based on the classification of propositions built by Satjipto in initiating the progressive legal theory, it can be said that the core theory of the progressive legal theory is in the form of a hypothesis stating that "Law is not only a matter (a business of rule), but also behavior (matter of behavior). In this case, Satjipto's statement is intended to say that law is not only a matter of regulations or formal texts but is also related to behavior.humans. Satjipto builds the hypothesis of progressive legal theory starting from the main basic assumption that states "law is for humans". Therefore, the core theory of progressive legal theory is in the form of a proposition that states that "Law is not only a matter (a business of rule), but also behavior (matter of behavior)".

If the core theory of progressive legal theory is a hypothesis stating that "law is not only a matter of rule, but also behavior" can be falsified and survives falsification efforts, then progressive legal theory is a scientific theory that can be accepted as temporary truth as long as its errors have not been found. If it is increasingly difficult to find errors, then progressive legal theory actually experiences confirmation (corroboration). However, if the core theory of progressive law cannot be falsified or does not survive falsification efforts, then progressive legal theory is not a scientific theory or could be a pseudo-science. If it turns out that progressive legal theory is a scientific theory but the core of progressive legal theory does not survive falsification efforts then progressive legal theory fails as a scientific theory.

According to the falsificationist view, the progress of scientific knowledge is based on problems related to information about the behavior of some aspects of the world or universe.

Falsifiable hypotheses are proposed by scientists to solve these problems, then the hypotheses are criticized and tested. Some of them may be immediately rejected, while others may be more resistant to testing, and all of them must be criticized and tested further and more severely. When a hypothesis is able to withstand testing after undergoing extensive and severe testing and is finally falsified, then a new problem is born which is expected to be far removed from the original problem that has been solved. This new problem requires the discovery of new hypotheses, followed by new criticisms and tests, and so the process continues indefinitely. A theory can never be said to be absolutely correct, no matter how well it has withstood severe tests, but it can be said with great hope that the current theory is superior to its predecessors, in the sense that it has withstood the tests that falsified its predecessors.⁶⁰

The progressive legal theory initiated by Satjipto originated from Satjipto's anxiety about the problems of law enforcement in Indonesia so far, where law enforcement is carried out with a positivistic-formalistic approach. Lawmaking based on texts has a strong tendency to enforce the law rigidly and regimentally. Such a way of lawmaking, especially one that is excessive in nature, raises various major problems, especially in relation to achieving justice. Starting from these legal problems, Satjipto Rahardjo then built a progressive legal theory as a form of effort to solve existing legal problems where law enforcement is carried out with positivistic-formalistic to become progressive law. Therefore, to become a strong and solid theory, especially when applied, progressive legal theory must withstand criticism and be tested so that it is falsifiable, so that progressive legal theory experiences confirmation (corroboration), until later there is a theory that is truly better than progressive legal theory to overcome new legal problems.

According to the falsificationist view, scientific hypotheses must be falsifiable, because only by setting aside all logical observational evidence can a law or theory be informative. If a statement is not falsifiable, then the world can have anything, can act however it wants without contradicting the statement.⁶¹ So in this case, the hypothesis of progressive legal theory which states that "Law is not only a matter of rule, but also of behavior" must be falsifiable when falsified.

Falsifying the progressive legal theory is an effort to demarcate the progressive legal theory from scientific, non-scientific or pseudo-science theories and as an effort to test the hypothesis of the progressive legal theory to find possible errors in the progressive legal theory, so that the progressive legal theory becomes a theory that is resistant to testing and superior to the previous legal theories, finally the progressive legal theory as a scientific theory experiences confirmation (corroboration). In addition, the effort to falsify the progressive legal theory is so that the

⁶⁰ Chalmers, *Apa itu yang dinamakan Ilmu*. h. 47-48.

⁶¹ Chalmers. h. 42.

progressive legal theory avoids errors that may arise when the progressive legal theory is applied to legislation and court decisions as well as by other law enforcement officers.

A single event that cannot be reproduced is not important for science, therefore progressive legal theory must be reproducible to universally resolve all forms of legal problems that occur in society, it is not enough with several court decisions that have used progressive legal theory in resolving a particular problem or legal case, so that progressive legal theory can be claimed as a theory that has been proven correct. This actually proves that progressive legal theory cannot universally resolve every legal problem in Indonesia, because it is only partial in certain cases, moreover a theory is claimed to have been proven correct not because the theory can be applied but because it has survived all the extensive and severe tests, finally *falsifiable* And undergoing confirmation (corroboration). Moreover, the truth of a theory can only be accepted as a temporary truth as long as its error has not been found. So whether the progressive legal theory is proven to be true or false cannot be determined or measured because it has been applied.

The significance of falsification of progressive legal theory is so that progressive legal theory can continue to develop as a scientific knowledge in the field of law, because the more resistant the progressive legal theory is to falsification efforts, the more progressive legal theory as a scientific theory will experience confirmation (corroboration). In addition, so that progressive legal theory can avoid errors that may arise in its application and can apply universally in every aspect and aspect of disputes or legal cases in the life of society.

Progressive legal theory has a core theory of "law is not just a matter of rule, but also of behavior." In other words, this statement means that law is not only a matter of regulations or formal texts but is also related to human behavior, so that there is no statement that can deny or refute such a statement (the core of the theory), especially if the statement is not at risk of being wrong. According to Popper, a theory is scientific only if it can be refuted by an imaginable event. The hypothesis "Law is not only a matter of rule, but also of behavior" is a statement that must be true. If examined further, the hypothesis is the understanding of law in the science of legal sociology, as stated by Soerjono Soekanto that the sociology of law is a science that theoretically-analytically and empirically highlights the influence of other social phenomena on law, and vice versa.⁶²

Based on the understanding of legal sociology, it can be seen that law does have a reciprocal relationship with human behavior, which means that law is not only a matter of regulations or formal texts but also relates to human behavior. If law is only a matter of rules, then it is not law in the sense of legal sociology. So the hypothesis "law is not only a matter of rule, but also of behavior" is the understanding of law in the science of legal sociology. So the core of progressive legal theory

⁶² Soerjono Soekanto, Pokok-pokok Sosiologi Hukum. (Jakarta: Rajawali, 1983). h. 29.

does not tell anything about the world of law and behavior. Because a scientific theory must contain informative value. According to the falsificationist school, a scientific theory must ideally provide information about how the world behaves in reality, and thus ignores statements about the possibilities of the world being able to logically behave when in reality it cannot.⁶³

A scientific theory has a predictive nature, if progressive law prioritizes the situation and conditions of society (concrete events) to form a law, then what kind of law is appropriate to overcome a particular legal problem that arises in society, cannot be described by the core of progressive legal theory, in other words, progressive legal theory is not predictive. So with that, progressive legal theory will always be consistent with law and behavior in any situation, as a result, progressive legal theory does not provide any information about law and behavior, because the statement "law is not only a matter (a business of rule), but also behavior (matter of behavior)", is not predictive and informative. So progressive legal theory as a theory is too general in its claims, so that it does not seem to rule out anything, as Popper argued that theories that seem to have great explanatory power are suspected precisely because so much can be explained by them.

The hypothesis of "law is not only a matter of rule, but also a matter of behavior", cannot be denied by an event that can be imagined to happen, because the theory in any circumstances will always be consistent with law and behavior, and will even always adjust to any particular circumstances or conditions about the legal world. As exemplified by Satjipto about the phenomenon where law is intervened by behavior, namely: "In a regulation, for example, it is clearly stated in a limited manner, that those who may file a Judicial Review (PK) against a criminal case that has been decided are the convict or his heirs, but the prosecutor has filed a PK and it has been accepted by the court. So, the manifestation of the PK law has been intervened by the behavior of the prosecutor".

The above example shows that behavior has intervened the law, which was originally not regulated by rules but was accepted by the court. On the contrary, this condition will evolve from a law that applies specifically-concretely to a general-abstract one. When behavior intervenes the law and is accepted by the court as a decision, the decision becomes a legal rule that applies specifically-concretely, if the rule is applied to other cases repeatedly, it will become a law known as jurisprudence, namely a legal rule that is born from a concrete case by a judge (judge made law).⁶⁴ So the legal rules that were previously specific-concrete evolved into general-abstract laws, as a result the rules in filing PK can not only be filed by the defendant and his heirs but also the prosecutor then become a guideline for all parties, especially judges in deciding all types of legal

⁶³ Chalmers, *Apa itu yang dinamakan Ilmu*. h. 42

⁶⁴ Enriko Simanjuntak, "Peran Yurisprudensi dalam Sistem Hukum di Indonesia." *Jurnal Konstitusi* 16, no. 1 (2019): 86-91.

cases filed for PK by the Prosecutor. If the condition is like this, then on the contrary, behavior has been intervened by legal rules. This is what is understood in the sociology of law that law and behavior have a reciprocal relationship.

The hypothesis that "law is not just a matter of rule, but also of behavior" shows the inconsistency of Satjipto's harsh criticism of the positivistic, normative and legalistic way of doing law.⁶⁵ Because it turns out that it does not completely and completely abandon the positivistic, normative, and legalistic legal methods in progressive legal theory. Satjipto's harsh criticism of the positivistic, normative, and legalistic legal methods contradicts the hypothesis of the progressive legal theory he built, because it turns out that it does not completely and completely abandon the positivistic, normative, and legalistic legal methods in progressive legal theory. This can be seen from his statement "Law is not only a matter (a business of rule), but also behavior (matter of behavior)", in the statement using the phrase "not only" which means that "not entirely/not entirely" that law is a matter of formal text/rules, and continued with the phrase "but also" which means "including/part of", which means that behavior is included/part of the law. This also shows that the core of the progressive legal theory initiated by Satjipto has been problematic from the start because the background to the birth of the progressive legal theory is inconsistent with the hypothesis that was built as the core of the theory.

The hypothesis of "law is not only a matter (a business of rule), but also a matter of behavior" built by Satjipto actually increasingly shows and proves that the way of law with formal texts/rules that are positivistic, normative, and legalistic is needed and relevant to this day. Furthermore, the hypothesis of "law is not only a matter (a business of rule), but also a matter of behavior" shows that law cannot be separated from rules and behavior, because both have a reciprocal relationship as understood by law in the sociology of law.

Therefore, the hypothesis "law is not only a matter of rule, but also of behavior" is a statement that cannot be denied and its truth cannot be doubted, it must be accepted as true, because law does have a reciprocal relationship with human behavior, which means that law is not only a matter of regulations or formal texts but also related to human behavior. Moreover, such a hypothesis statement has been described by the science of legal sociology long before the birth of progressive legal theory. Therefore, the hypothesis of progressive legal theory is not something new in the world of legal science, especially legal sociology.

⁶⁵ Satjipto Rahardjo, *Penegakan Hukum Progresif*. h. 10, 62. Progressive legal theory was born because so far the law in Indonesia has been shackled by the way of law with formal regulations or texts. According to Satjipto, this way of law is in line with the positivistic, normative, and legalistic way of law which is based on texts that have a strong tendency to be rigid and regimentative in law. This way of law, especially if it is excessive, gives rise to various major problems, especially in relation to achieving justice.

So based on the application of falsification to the progressive legal theory which has a theoretical core in the form of the hypothesis that "law is not only a matter of rule, but also of behavior (matter of behavior)" it is not *falsifiable*, so that progressive legal theory is not a scientific theory. However, this does not mean that progressive legal theory is not enlightening or not meaningful in overcoming legal problems in Indonesia, because it is possible that progressive legal theory at a certain time is not *falsifiable*. However, in the future it could become falsifiable and experience corroboration if the core of the progressive legal theory is immediately corrected for its shortcomings, so that it becomes a scientific theory as long as it is not overturned by other new, more ideal scientific theories.

CONCLUSION

Falsification is a method of demarcation in the Philosophy of Science. If a theory cannot be falsified then it is not a scientific theory or even pseudo-science, however, it does not mean that the theory is not enlightening or meaningless in society, it may be that a theory is not falsifiable at a certain time, but along with the development (science or technology) the theory is falsifiable later and experiences confirmation (corroboration), as long as it is not overturned by other new scientific theories.

The core of progressive legal theory is a hypothesis stating that "law is not only a matter of rule, but also a matter of behavior" is not falsifiable, because there is no statement that can be denied or refuted and is not at risk of being wrong and must be accepted as true, besides that the core of progressive legal theory is not informative and predictive, because the statement "law is not only a matter of rule, but also a matter of behavior" is actually the definition of law in the science of legal sociology. Thus, progressive legal theory is non-*falsifiable*, therefore progressive legal theory is not a scientific theory. However, it does not mean that progressive legal theory is not enlightening or not meaningful to overcome legal problems in Indonesia.

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